AGENDA

DOE/NETL's

Mercury Control Technology R&D Program Review

Pittsburgh Airport Hyatt Hotel

July 14-15, 2004

WEDNESDAY, July 14

7:00 am Registration and Continental Breakfast—*Regency A Foyer*

Meeting Convenes in Regency A

Program Review Overview

8:00 am **Introduction**
Thomas J. Feeley, III, Product Manager, Innovations for Existing Plants
U.S. Department of Energy, National Energy Technology Laboratory

8:05 am **Welcome**
Joe Strakey, Associate Director, Office of Coal and Environmental Systems
U.S. Department of Energy, National Energy Technology Laboratory

8:20 am **Overview of DOE-NETL's Mercury R&D Program**
Lynn A.Brickett, Project Manager, Environmental Projects Division
U.S. Department of Energy, National Energy Technology Laboratory

8:35 am **Air Emissions and By-product Management Generation**
George Offen, Area Manager, Advanced Coal Program
Electric Power Research Institute

Sorbent Injection Research

8:50 am **Long-term Operation of a COHPAC System for Removing Mercury from Coal-Fired Flue Gas**
Jean Bustard, ADA-ES, Inc.

9:20 am **Carbon Injection at Four Facilities**
Sharon Sjostrom, ADA-ES, Inc.

9:50 am Break

10:00 am **SEA and Activated Carbon Addition for Mercury Control**
Michael Holmes, Energy & Environmental Research Center

10:30 am **Full-Scale Testing of Activated Carbon**
Carl Richardson, URS Corporation

11:00 pm **Sorbent Technologies**
Sid Nelson, Sorbent Technologies

11:30 pm **Amended Silicates**
Jim Butz, ADA Technologies

12:00 pm Group Lunch—*Regency B & C*

1:00 pm: **PANEL DISCUSSION: Sorbent Injection for Hg Control**
(30 minutes presentation / 30 minutes questions)

2:00 pm **Pilot Testing of Oxidation Catalysts for Enhanced Mercury Control by Wet FGD Systems**
Gary M. Blythe, URS Corporation

2:30 pm Break

2:45 pm **Oxidation of Mercury Across SCR Catalysts in Coal-Fired Power Plants**
Constance Senior, Reaction Engineering International

3:15 pm **Evaluation of Mercury Emissions from Coal-Fired Facilities with SCR-FGD Systems**
Jeffrey Withum, CONSOL Energy Inc.

3:45 pm **Evaluation of MerCap™ for Power Plant Mercury Control**
Tim Ebner, Apogee Scientific, Inc.

4:15 pm **The CONSOL/Allegheny Pilot Plant Study of Low-Temperature Mercury Capture with an Electrostatic Precipitator**
Richard A. Winschel, CONSOL Energy Inc.

4:45 pm **Mercury Control Using Combustion Staging**
Vitali Lissianski, GE Energy & Environmental Research Corp.

5:15 – 6:30 pm **POSTER SESSION and Light Refreshments**—*Allegheny A, B, & C*

Poster Presenters:

Assessment of Low-Cost Novel Sorbents for Coal Fired Power Plant Mercury Control
Tim Ebner, Apogee Scientific, Inc.

Catalyst Additives to Enhance Mercury Oxidation and Capture
Thomas K. Gale, Southern Research Institute

Testing of Mercury Control with Calcium Based Sorbents and Oxidizing Agents
Thomas K. Gale, Southern Research Institute

Mercury Gas Phase Oxidation of Elemental Mercury
Ted S.-G. Chang, Lawrence Berkeley National Laboratory

Mercury Removal Results from Two Coal-Fired Utility Boilers
Richard Boren, EnviroScrub Technologies Corp.

The Chemistry of Mercury Oxidation
C. David Livengood and *Marshall H. Mendelsohn,* Argonne National Laboratory

Computational Modeling of Mercury Capture by Activated Carbon Injection
Jens Madsen, Fluent Inc.

Ab Initio Modeling of Neutral and Cationic Hg-Arene Complexes
Jan Steckel, U.S. Department of Energy, National Energy Technology Laboratory

Monitoring and Modeling of Mercury Transport and Deposition in the Ohio River Valley
Reddy Yatavelli, Ohio University

Mercury Control Using Combustion Staging
Vitali Lissianski, GE Energy & Environmental Research Corp.

Elimination of Particulate Matter Interferences During Real-time Mercury Stack Sampling
Francisco J. Romay, MSP Corporation

Development of a Real-time Speciating Mercury Emissions Monitor
Thomas A. Reichardt, Sandia National Laboratory

THURSDAY, July 15

Mercury Control Technology R&D

7:00 am Registration and Continental Breakfast—*Regency A Foyer*

Meeting Convenes in Regency A

8:00 am **Novel Techniques for Mercury Capture and Measurement**
Evan J. Granite, U.S. Department of Energy, National Energy Technology Laboratory

8:30 am **Pilot-Scale Research at NETL on Mercury Measurement and Control**
Andy Karash, U.S. Department of Energy, National Energy Technology Laboratory

9:00 am	**Mercury Measurement at Utility Firing Gulf Coast Lignite** *Dennis L. Laudal,* Energy & Environmental Research Center
9:30 am	**Mercury Control Technologies for Electric Utilities Burning Lignite Coals** *John H. Pavlish,* Energy & Environmental Research Center
10:00 am	Break
10:30 am	**Mercury Control for Subbituminous Coals** *Steve Benson,* Energy & Environmental Research Center
11:00 am	**Direct Measurement of Mercury in Power Plant Plumes** *Dennis L. Laudal,* Energy & Environmental Research Center
11:30 pm	**Assessing the Mercury Health Risks Associated with Coal-Fired Power Plants: Impacts of Local Deposition** *Terry Sullivan,* Brookhaven National Laboratory
12:00 pm	Group Lunch—*Regency B & C*

By-Product Characterization

1:00 pm	**The Effect of Activated Carbon Injection on Arsenic, Cadmium, Lead and Selenium in Flue Gas** *Constance Senior,* Reaction Engineering International
1:30 pm	**Speciation of Arsenic and Selenium, and Fate of Mercury in CCPs** *Ken Ladwig,* EPRI
2:00 pm	**Mercury Impacts on By-Products Management** *Debra F. Pflughoeft-Hassett,* Energy & Environmental Research Center
2:30 pm	Break
2:45 pm	**Aqueous Stability of Mercury on Fly Ash** *Ann G. Kim,* U.S. Department of Energy, National Energy Technology Laboratory
3:15 pm	**Hg Measurement at five US Gypsum Facilities** *Gary Blythe,* URS Corporation
3:45 pm	**Wrap-up** *Lynn A. Brickett,* U.S. Department of Energy, National Energy Technology Laboratory
4:15 pm	Adjourn